**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## 19587 U.S. PTO 10/828359 041704

Alexandria, VA 22313-1450						
		NEW APPLICATION TRANSMITTAL Under 37 CFR § 1.53(b)	-			
Transn	nitted I	herewith for filing is the patent application of				
Invento	or(s):	Tom Westberg; Mark Vandlik; and Rohit Vishnoi				
WARNING: 37 (a)		C.F.R. § 1.41(a)(1) points out:  A patent is applied for in the name or names of the actual inventor or inventors.  (1) The inventorship of a nonprovisional application is that inventorship set forth in the cath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(c). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1. 53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors.				
For (tit	le):	Fluid Pressure Actuated Blood Pumping Systems and Methods with Continuous Inflow and Pulsatile Outflow Conditions				
1.		e of Application new application is for a(n) Original (nonprovisional) Design Plant				
NOTE:	OTE: If one of the following 3 items apply then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTA WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.					
	[]	Divisional. Continuation. Continuation-in-part (C-I-P).				
2.	Bend [×]	efit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)  The new application being transmitted claims the benefit of prior U.S. application Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENE OF PRIOR U.S. APPLICATION(S) CLAIMED.	ı(s). FIT			
		CERTIFICATION UNDER 37 C.F.R. 1.10°				
United S	tates P	that this New Application Transmittal and the documents referred to as attached therein are being deposited with ostal Service on this date 20 April 2004, in an envelope as Express Mail Post Office to Addressee' mailing Language and Application Patents, PO Box 1450, Alexandria, VA 22313-1450	auci			
•		(type or print name of person mailing paper)  Signature of person mailing paper	<u> </u>			

(Application Transmittal - page 1 of 5) .

• • •	quired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 Deficiation
	132 Pages of specification
	01 Pages of claims
	01 Abstract
	Sheets of drawing [x] formal
	[x] formal [] informal
Ŗ. Oth	er documents enclosed:
Additi	onal papers enclosed
, ,	Preliminary Amendment
[ ] [x]	Information Disclosure Statement (37 C.F.R. 1.98)
[x]	Form PTO-1449 (PTO/SB/08A and 08B)
	Citations
	Declaration of Biological Deposit
[ ]	Submission of "Sequence Listing," computer readable copy and/or amendment perta
	thereto for biotechnology invention containing nucleotide and/or amino acid sequence
[ ].	Authorization of Attorney(s) to Accept and Follow Instructions from Representative
Ϊĺ	Special Comments
[]	Other
Decla	ration or oath
[]	Enclosed
•	[ ] newly executed
_	[ ] copy from parent application identified above
Execu	ted by (check all applicable boxes)
	[ ] inventor(s). [ ] legal representative of inventor(s).
	[ ] joint inventor or person showing a proprietary interest on behalf of inventor
	refused to sign or cannot be reached.
	[ ] This is the petition required by 37 CFR 1.47 and the statement require 37 CFR 1.47 is also attached. See Item 13 below for fee.
[x]	Not Enclosed.
	[x] Application is made by a person authorized under 37 C.F.R. 1.41(c) on behalf the above named inventor(s). (The declaration or oath, along with the surch required by 37 CFR 1. 16(e) can be filed subsequently).
Invert	terchin Statement
invent	torship Statement ventorship for all the claims in this application are:
Their	The same.
	THE SAILE.
[x]	Not the same. An explanation, including the ownership of the various claims at the time
The in [x]	Not the same. An explanation, including the ownership of the various claims at the time last claimed invention was made is submitted.

7.	Language										
	[x] English [] Non-English										
	LJ		The attack	hed transla	ation includes	a stateme	nt that the trans	lation is accurate. 37			
			C.F.R. 1.5	52(d).		•					
· 8.	Assig	nment .						•			
	[x] An assignment of the Invention to <u>Baxter International Inc.</u> [] is attached. A separate [] COVER SHEET FOR ASSIGN							AENT (DOCI IMENT			
			is attache	d. A sepa ANYING N	NEW PATENT	APPLICAT	FOR ASSIGNITION or [ ] FOI	RM PTO 1595 is also			
		attached.									
		[x] []	will follow. was filed i		nt application i	dentified al	bove	•			
9.	CERT	IFIED C	OPY								
	Certifie	ed copy(	ies) of appli	cation(s)							
	Country				Appln. No.			Filed			
	Country		_		Appin. No.			Filed			
	Country	-		Appin. No.				Filed			
	Country				Appin. No.		<del>.</del>	Filed			
	from w	hich pri	ority is claim	ed .							
	[]		) attached.								
	[]	will foll				•					
NOTE:	The fore and 1.63		ation forming th	e basis for th	e clam for priority r	nust be refern	ed to in the oath or d	leclaration. 37 CFR 1.55(a)			
10.	Fee Calculation (37 C.F.R. 1.16)										
	A.	[x]	Regular a	pplication							
				C	CLAIMS AS FIL	.ED					
				Number	Number	Number	Rate	Basic Fee 37 CFR 1.16(a)			
				Filed	Included in Basic Fee	Extra	·	\$770.00			
Total C	Claims 37	CFR 1:16(	(c)	1	-20 =	(19)	x \$ 18.00	. \$0			
Independent Claims (37 CFR 1.16(b) 1			1	-3 =	(2)	x \$ 86.00	\$0				
Multipl CFR 1		ent daim(s	s) if any (37				\$290.00	\$0			
FILIN	G FEE	CALCUI	ATION .					\$770			
		[ ]	Amendme	ent cancell	ing extra claim	s enclosed					
		[ ] .	Amendme	nt deleting	multiple-depe	ndencies e	enclosed.				
•		( )	. 55 151 54		•	Calculation		770.00			

	<b>B.</b>	[]	Design application (\$340.00 - 37 CFR 1.16(f)) Filing Fee Calculation	
	<b>C</b> .	[]	Plant application (\$530.00 - 37 CFR 1.16(g)) Filing Fee Calculation	
11.	Small	Entity S The apentity s	statement oplicant is a Small Entity as defined by 37 CFR 1.status. Small Entity Filing Fee:	
12.	Fee Pa	ayment Not Er	Being Made at This Time nclosed No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. 1.	. 16(e) can be paid subsequently.)
	[×]	Enclos [x] [ ] [ ]		770.00
13.	Metho [x]	Check Charg	syment of Fees  k in the amount of \$  ge Account No in the amount of  dicate of this transmittal is attached.	·
14.	Autho [x]	TheC	to Charge Additional Fees commissioner is hereby authorized to charge the foluring the entire pendency of this application to Acc 37 C.F.R. 1.16(a), (f) or (g) (filing fees) 37 C.F.R. 1.16(b), (c) and (d) (presentation of e 37 C.F.R. 1.16(e) (surcharge for filing the basic filater than the filing date of the application) 37 C.F.R. §§ 1.17(a)(I-5) (extension fees pursu 37 C.F.R. 1.17 (application processing fees) 37 C.F.R. 1.18 (issue fee at or before mailing of C.F.R. 1.311(b))	extra claims) ling fee and/or declaration on a date ant to § 1.136(a)).

15.	Instru	ctions as to C	
	[x]	Credit Accou Refund	No. <u>06-2360</u>
Reg. No. 29,243 Tel. No.: (262) 783 - 1300			SIGNATURE OF PRACTITIONER  Daniel D. Ryan  (type or print name of attorney)  RYAN KROMHOLZ & MANION, S.C.  (P.O. Address)  Post Office Box 26618
			MILWAUKEE, WISCONSIN 53226
	St.	etoment When	additional Pages are Added
[×]	(x	] Plus	Ided Page for New Application Transmittal Where Benefit of Prior U.S ion(s) Claimed
[]	(if	atement Wher no further page eck the followin	lo Further Pages Added form a part of this Transmittal, then end this Transmittal with this page and tem)
	[ ]	] This	nsmittal ends with this page.

PATENT

## ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED

NOTE: "In order for an application to claim the benefit of a prior filed copending national application, the prior application must name as an inventor at least one Inventor named in the later filed application and disclose the named inventor's invention claimed in at least one claim of the later filed application in the manner provided by the first paragraph of 35 U.S.C. 112." 37 CFR 1.78(a).

NOTE: "IN ADDITION THE PRIOR APPLICATION MUST BE (1) COMPLETE AS SET FORTH IN S 1.51, OR (2) ENTITLED TO A FILING DATE AS SET FORTH IN S 1.53(B) AND INCLUDE THE BASIC FILING FEE SET FORTH IN S 1.16; OR (3) ENTITLED TO A FILING DATE AS SET FORTH IN S 1.53(B) AND HAVE PAID THEREIN THE PROCESSING AND RETENTION FEE SET FORTH IN S 1.21(L) WITHIN THE TIME PERIOD SET FORTH IN S 1.53(D). "37 CFR 1.78(A).

## 16. Relate Back-35 U.S.C. 120

NOTE: "ANY APPLICATION CLAIMING THE BENEFIT. OF A PRIOR FILED COPENDING NATIONAL OR INTERNATIONAL APPLICATION MUST CONTAIN OR BE AMENDED TO CONTAIN IN THE FIRST SENTENCE OF THE SPECIFICATION FOLLOWING THE TITLE A REFERENCE TO SUCH PRIOR APPLICATION IDENTIFYING IT BY SERIAL NUMBER AND FILING DATE OR INTERNATIONAL APPLICATION NUMBER AND INTERNATIONAL FILING DATE AND INDICATING THE RELATIONSHIP OF THE APPLICATIONS." 37 CFR 1.78(A). SEE ALSO THE NOTICE OF APRIL 28, 1987 (1079 O.G. 32 TO 46).

[X] The specification includes the following recitation:

**Related Applications:** 

This application claims the benefit of co-pending application Serial No. 09/390,265 filed 3 September 1999 and entitled "Fluid Pressure Actuated Blood Pumping Systems and Methods with Continuous Inflow and Pulsatile Outflow Conditions". This application also claims the benefit of copending patent application Serial No. 09/390,268 filed 3 September 1999 and entitled "Programmable Fluid Pressure Actuated Blood Processing Systems and Methods".

NOTE: THE PROPER REFERENCE TO A PRIOR FILED PCT APPLICATION WHICH ENTERED THE U.S. NATIONAL PHASE IS THE U.S. SERIAL NUMBER AND THE FILING DATE OF THE PCT APPLICATION WHICH DESIGNATED THE U.S.

NOTE: (1) WHERE THE APPLICATION BEING TRANSMITTED ADDS SUBJECT MATTER TO THE INTERNATIONAL APPLICATION THEN THE FILING CAN BE AS A CONTINUATION-IN-PART OR (2) IT IS DESIRED TO DO SO FOR OTHER REASONS, E.G. WHERE NO DECLARATION IS AVAILABLE, NO ENGLISH TRANSLATION IS AVAILABLE OR NO FEE IS TO BE PAID ON FILING THEN THE FILING CAN BE AS A CONTINUATION. IN THESE CASES THE INTERNATIONAL APPLICATION DESIGNATING THE U.S. IS TREATED AS THE PARENT CASE IN THE U.S. AND IS ANALTERNATIVE TO THE COMPLETION OF THE INTERNATIONAL APPLICATION UNDER 35 U.S.C. 371(C)(4) WHICH MUST MEET THE REQUIREMENTS OF 37 CFR 1.61(A). THIS ALTERNATIVE PERMITS THE COMPLETION OF THE FILING REQUIREMENTS WITHIN ANY TERM SET BY THE PTO UNDER 37 CFR 1.53(D) TO WHICH THE EXTENSION PROVISIONS OF 37 CFR 1.136(A) APPLY. (WHEREAS, IF THE FILING IS AS AN INTERNATIONAL APPLICATION ENTERING THE U.S. STAGE THEN THE FEE, DECLARATION AND/OR ENGLISH TRANSLATION (WHERE NECESSARY) IS DUE WITHIN 20 MONTHS OF THE PRIORITY DATE BUT CAN BE PAID WITHIN 22 MONTHS OF THE PRIORITY DATE (OR IS DUE WITHIN 30 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE

NOTE: THE DEADLINE FOR ENTERING THE NATIONAL PHASE IN THE U.S. FOR AN INTERNATIONAL APPLICATION WAS CLARIFIED IN THE NOTICE OF APRIL 28, 1987 (1079 O.G. 32 TO 46) AS FOLLOWS:

"The Patent and Trademark Office considers the International application to be pending until the 22nd month from the priority date if the United States has been designated and no Demand for International Preliminary Exemination has been filed prior to the expiration of the 19th month from the priority date and until the 32nd month from the priority date if a Demand for International Preliminary Exemination which elected the United States of America has been filed prior to the expiration of the 19th month from the priority date, provided that a copy of the international application has been communicated to the Patent

and Trademark Office within the 20 or 30 month period respectively. If a copy of the international application has not been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively, the international application becomes abandoned as to the United States 20 or 30 months from the priority date respectively. These periods have been placed in the rules as paragraph (h) of S 1.494 and paragraph (i) of S 1.495. A continuing application under 35 U.S.C. 365(c) and 120 may be filed anytime during the pendency of the international application."

17.	Relate Back-35 U.S.C.	119 Priority Claim	for Prior Application
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application. 37 cfr 1.60(c). (Dealing with the continuation situation).

	The prior U.S.	application(s), includ	ing any prior Inte	emational Applica reign priority (ies	ation designating the U ) as follows:	J.S.,		
	country		l. no.	filed on				
	Courilly	црр.			• •			
	[ ] been f	opy (ies) has (have) iled on ) attached	in prior app	lication	which was filed on	<u> </u>		
WARNIN	Bureau may application. To is placed in a disposed of if the prosecution the folders are folders, make continuing application.	not be relied on without ar his is so because the certifi folder and is not assigned the national stage is not er on of a continuing application and transfer them to the con-	ny need to file a Celed copy of the priorit a U.S. Serial Number on. An alternative wo tinuing application. I transfer the certified cordingly, the priority	ritied Copy of the pric ty epplication communi er unless the national s child be to physically re The resources require I copies enter and ma	d to the PTO by the Internal ority application in the continuous leated by the International Bustage is entered. Such folder not be available if needed la move the priority documents d to request transfer, retrievable a record of such copies in of international applications we	reau reau s are iter in from re the in the		
18.	Maintenance	of Copendency of I	Prior Application	on				
NOTE:	The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the papers constituting the filing of the continuation application.							
	A. [ j	Extension of time	in prior applic	ation				
		[ ] A petition,	fee and respon	nse extends the	term in the pending p	orior		
		[ ] A copy of the	e petition filed	in prior applicatio	n is attached			
	B. [ ]	prior applic	al petition for ex ation.	tension of time is	s being filed in the pen			
		[] A copy of th	e conditional pe	tition filed in the p	rior application is atta	ched		
19.	Further inver	ntorship Statement	Where Benefit	of Prior Applica	ition(s) Claimed			
NOTE:	If the continuation, continuation-in-part, or divisional application is filed by less than all the inventors named in the prior application a statement must accompany the application when filed requesting deletion of the names of the person or persons who are not inventors of the invention being claimed in the continuation, continuation-in-part, or divisional application. 37 CFR 1.62(a)							
NOTE:	declaration as req additional subject	quired by § 1.63 must be 1 matter being claimed, addi cation which discloses and	iled. In those situali tional inventors may claims only subject i	ons where a new oau be named in the conti matter disclosed in a p	closure by amendment, an o h or declaration is required o nuing application. In a continu prior application, no additiona s than all the invantors in the	uation al oath		

	(a)	[ ]	This application discloses and claims only subject matter disclosed in the prior application whose particulars are set out above and the inventor(s) in this application are  [ ] the same. [ ] the following inventor(s) have been deleted:		
			[ ] the following inventor(s) have been added:		
	(b)	[]	This application discloses and claims additional disclosure and a new declaration or oath is being filed. With respect to the prior application the inventor(s) in this application are  [ ] the same.		
			the following inventor(s) have been deleted:		
			the following inventor(s) have been added:		
	(c)	The inv	ventorship for all the claims in this application are the same.  not the same, and an explanation, including the ownership of the various claims at the time the last claimed invention was made  [ ] is submitted.  [ ] will be submitted.		
20.	Aband	Please when t when t	at of Prior Application (if applicable) a abandon the prior application at a time while the prior application is pending or the petition for extension of time or to revive in that application is granted and this application is granted a filing date so as to make this application copending aid prior application.		
NOTE:	THE NOTICE OF MAY 13, 1983 (103, TMOG 6-7) THE FILING OF A CONTINUATION OR N-PART APPLICATION IS A PROPER RESPONSE WITH RESPECT TO A PETITION FOR EXTENSION ETITION TO REVIVE AND SHOULD INCLUDE THE EXPRESS ABANDONMENT OF THE PRIOR NOITIONED UPON THE GRANTING OF THE PETITION AND THE GRANTING OF A FILING DATE TO S APPLICATION.				